HIGHS.

Five of the highs were first noted on or near the north Pacific Coast. Two of these reached the Atlantic Coast, the other three disappeared in the interior. The month was remarkable in that highs III, V, VII, VIII, and X began in the interior of the United States. All of the highs except II and IX were last noted off or near the Atlantic Coast.

Decided falls in temperature occurred in connection with these highs as follows: While II was in Idaho the temperature fell 28° in twenty-four hours at Huron, a. m. of 3d. On 9th, a. m., while IV was to the north of Montana there was a fall of 28° at Des Moines. As high VI passed into South Dakota, evening of 16th, there was a fall of 36° at Dodge City and Concordia. The next morning VI had moved to Wisconsin, and there was a fall in temperature of 36° at Northfield and of 32° at Oswego and Rochester. While high area IX moved to Wyoming on the evening of the 26th there was a temperature fall of 36° at Moorhead, and of 30° at Huron.

LOWS.

Two lows during the month, VII and XI, began in the eastern part of the Gulf of Mexico and moved up the Atlantic Coast. These storms were quite severe on several days and shipping was fully warned. Storms II, III, IV, V, and XII began to the north of Montana; I, IX, and X, off or near the north Pacific Coast; VI began and ended near the Rocky Mountain slope; and VIII began in Ontario. The last seen of I, V, IX was in Manitoba, or near Lake Superior; II, III, IV, VIII, and XII disappeared over Newfoundland; while VI and X were last noted in the Southwest.

Movements of centers of areas of high and low pressure.

Number.	First observed.			Last observed.			Path.		Average velocities.	
	Date.	Lat. N.	Long. W.	Date.	Lat. N.	Long W.	Length.	Duration.	Daily.	Hourly.
High areas.		°	°		°	°	*Miles.*	*Days.*	*Miles.*	*Miles.*
I	28, a.m.	42	127	5, p.m.	36	81	4,390	7.5	585	24.4
II	3, p.m.	47	122	7, p.m.	27	96	2,200	4.0	550	22.9
III	6, p.m.	48	101	9, a.m.	33	79	2,020	3.5	808	33.7
IV	7, a.m.	52	118	12, a.m.	48	55	3,290	5.0	658	27.4
V	12, a.m.	41	103	16, p.m.	34	76	2,780	4.5	618	25.8
VI	15, a.m.	43	121	19, p.m.	39	73	2,740	4.0	685	28.5
VII	19, a.m.	49	84	22, p.m.	43	69	1,350	3.5	386	16.1
VIII	19, p.m.	43	110	27, p.m.	44	60	3,650	8.0	456	19.0
IX	24, a.m.	42	126	29, p.m.	38	103	1,950	5.5	354	14.8
X	29, p.m.	34	93	1, a.m.	46	59	2,040	2.5	816	34.0
Total							26,410	47.0	5,916	
Mean of 10 tracks							2,641		592	24.7
Mean of 47 days									562	23.4
Low areas.										
I	29, p.m.	49	123	2, p.m.	54	103	1,170	3.0	390	16.2
II	3, p.m.	54	112	7, p.m.	47	55	2,700	4.0	675	28.1
III	6, p.m.	53	116	9, p.m.	47	53	2,880	3.0	960	40.0
IV	10, a.m.	54	116	13, a.m.	50	61	2,490	3.0	830	34.6
V	12, a.m.	52	117	14, a.m.	46	92	1,320	2.0	660	27.5
VI	13, p.m.	43	104	15, p.m.	33	106	820	2.0	410	17.1
VII	15, a.m.	22	84	21, a.m.	41	69	2,460	6.0	410	17.1
VIII	16, a.m.	47	77	17, p.m.	48	52	1,240	1.5	827	34.5
IX	20, p.m.	50	124	23, a.m.	52	93	1,440	2.5	576	24.0
X	22, p.m.	46	127	27, a.m.	31	95	2,840	4.5	631	26.3
XI	23, a.m.	24	81	26, p.m.	34	73	1,470	3.5	420	17.5
XII	26, p.m.	54	114	29, p.m.	49	53	2,700	3.0	900	37.5
Total							23,530	38.0	7,089	
Mean of 12 tracks							1,961		641	26.7
Mean of 38 days									619	25.8

CLIMATOLOGY OF THE MONTH.

By A. J. HENRY, Chief of Division of Records and Meteorological Data.

GENERAL CHARACTERISTICS.

Unusual warmth and dryness in almost all sections were the chief characteristics of the month.

From the 1st to the 10th occasional light rains prevailed in the Lake Region; elsewhere, the drought referred to in the September REVIEW continued. From the 10th to the 13th general rains occurred throughout the Southwest, the Plains, the Mississippi Valley, and eastward to the Atlantic. In some regions the rains were light and drought still prevailed at the end of the month. An area of cloud and rain hovered over the Atlantic Coast from the 19th to the 30th, giving an abundance of moisture to the immediate coast region. On the 31st an area of low pressure appeared in the lower Mississippi Valley, and the month closed with prospects of good rains throughout the drought-stricken regions. The rainfall of Nevada, Utah, Wyoming, Colorado, portions of Texas, Kansas, Nebraska, and South Dakota was above the normal.

The weather was very favorable to the gathering of crops but too dry for seeding. Killing frosts came too late in the month to cause much damage.

There were no severe local or general storms. Heavy snows (13.2 inches at Denver) and high winds prevailed over Colorado and Wyoming on the 26th, causing a general blockade of street car lines and much damage to telegraph and telephone wires.

Heavy fog prevailed over the Great Lakes from the 24th to the 27th, inclusive, greatly impeding navigation and causing numerous strandings and minor casualties.

Forest fires were numerous in northern New York, Ohio, and other regions, where the lack of rain greatly increased the danger of combustion.

ATMOSPHERIC PRESSURE.

[In inches and hundredths.]

Pressure was generally higher than usual, and the geographic distribution was not in close accord with normal conditions.

As will be seen by an examination of Chart IV, the eastern area of high pressure occupies the Middle States and New England instead of the South Atlantic States, as in months when normal conditions prevail. The Pacific high lies just to the northeast of the Great Basin and is inclosed by the isobar of 30.10 inches. Ordinarily this area of high pressure lies farther to the westward, and is generally bounded by an isobar opening on the Pacific Ocean.

The pressure distribution of the current month belongs to the dry weather type, of which a number of instances have occurred during the last twenty-five years. The month of October, 1879, furnishes almost an exact counterpart of the current month as regards the three elements, pressure, heat, and moisture.

The distribution of mean atmospheric pressure reduced to sea level, as shown by mercurial barometers, not reduced to standard gravity, and as determined from observations taken daily at 8 a. m. and 8 p. m. (seventy-fifth meridian time), is shown by isobars on Chart IV. That portion of the reduction to standard gravity that depends on latitude is shown by the numbers printed on the right-hand border.

The numerical values of Table I should be consulted for additional details.